



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/584,501	06/22/2006	Kornelis Meinds	NL03 1514 US1	4592				
65913 NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131	7550 07/31/2008		<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">GOOD JOHNSON, MOTTLEWA</td></tr></table>		EXAMINER		GOOD JOHNSON, MOTTLEWA	
EXAMINER								
GOOD JOHNSON, MOTTLEWA								
			<table border="1"><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>2628</td><td></td></tr></table>	ART UNIT	PAPER NUMBER	2628		
ART UNIT	PAPER NUMBER							
2628								
			<table border="1"><tr><td>NOTIFICATION DATE</td><td>DELIVERY MODE</td></tr><tr><td>07/31/2008</td><td>ELECTRONIC</td></tr></table>	NOTIFICATION DATE	DELIVERY MODE	07/31/2008	ELECTRONIC	
NOTIFICATION DATE	DELIVERY MODE							
07/31/2008	ELECTRONIC							

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

### Office Action Summary

**Application No.**

10/584,501

**Applicant(s)**

MEINDS ET AL.

**Examiner**

M GOOD JOHNSON

**Art Unit**

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-893)  
Paper No(s)/Mail Date 06/22/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3 recites the limitation "said first and second blur filter units", in line 3 and claims 10, 13 and 14 recite the limitation "said first and second blur filtering" in lines 2 respectively. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2, 7, 8-9, 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Leather et al., U.S. Patent Number 6,999,100 B1.

Regarding claim 1, Leather discloses computer graphics processor, having a forward mapping renderer, comprising: a texture space rasterizer for rasterizing a

primitive in texture space (col. 17, lines 5-6), a color generating unit for determining the color of the output of the texture space rasterizer and for forwarding a color sample along with coordinates (col. 17, lines 6-10), a 2-pass screen space resampler for resampling the color sample determined by the color generating unit (col. 21, line 35), and at least one one-dimensional blur filter unit associated to at least one pass of said screen space resampler for performing a one-dimensional blur filtering before performing said at least one pass (col. 21, lines 33-35)

Regarding claim 2, Leather discloses a first and a second one-dimensional blur filter unit wherein said screen space resampler comprise a first pass and a second pass screen space resampler (col. 21, lines 31-42, horizontal and vertical filter with resampling in both dimensions), wherein said first blur filter unit is arranged before said first pass screen space resampler and said second blur filter unit is arranged before a second pass screen space resampler (figure 13, col. 20, lines 1-48).

Regarding claim 7, Leather discloses first and second blur filter units are low pass filter having a weighted footprint (col. 21, lines 45-50, applying a weighted coefficient to each of the samples being vertically filtered).

Regarding claims 8, 9 and 14, they are rejected based upon similar rational as above claims 1, 2 and 7 respectively.

Regarding claim 15, it is rejected based upon similar rational as above claim 1.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3-6 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leather et al. as applied to claims 1, 2, 8 and 9 above, and further in view of Kaufman et al., U.S. Patent Number 6,674,430.

Regarding claim 3, it is noted that Leather fails to disclose the first and second blur units are one-dimensional blur filters having footprints with a size depending on a corresponding shear factor.

Kaufman discloses two one-dimensional filtering operation and further discloses each filter is defined by a footprint and profile, col. 18, lines 65-66, and further discloses using shear transformations, col. 22, lines 4-5.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include in the filter units as disclosed by Leather the one-dimensional blur filters with footprints and size having a shear transformation as disclosed by Kaufman, to provide improved real time rendering of three-dimensional volume processing, by implementing shear operations.

Regarding claim 4, Kaufman discloses said rasterizer is adapted to determine said shear factor (col. 22, lines 1-5).

Regarding claim 5, Kaufman discloses a delay unit for storing a plurality of color samples to perform an averaging of overlapping color samples in order to determine blurred color samples (col. 10, lines 45-60)

Regarding claim 6, Kaufman discloses first and second blur filter units are box low pass filter having a footprint determined by the shear factor (col. 18, lines 65-66).

Regarding claims 10-13, they are rejected based upon similar rational as above claims 3-6.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M GOOD JOHNSON whose telephone number is (571)272-7658. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Motilewa Good-Johnson/  
Art Unit 2628

mgj